

Two new species of plume moths of the genus *Singularia* Arenberger, 1988 (Lepidoptera: Pterophoridae) from Colombia and Ecuador

Два новых вида пальцекрылок из рода *Singularia* Arenberger,
1988 (Lepidoptera: Pterophoridae) из Колумбии и Эквадора

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КЛЮЧЕВЫЕ СЛОВА: Биоразнообразие, новые виды, Pterophoridae, Колумбия, Эквадор.

ABSTRACT. The article describes two new plume moths species from Colombia and Ecuador: *Singularia zolotuhini* Kovtunovich et Ustjuzhanin sp.n. and *Singularia kofani* Kovtunovich et Ustjuzhanin sp.n.

РЕЗЮМЕ. Описываются два новых вида пальцекрылок из Колумбии и Эквадора: *Singularia zolotuhini* Kovtunovich et Ustjuzhanin sp.n. и *Singularia kofani* Kovtunovich et Ustjuzhanin sp.n.

The genus *Singularia* Arenberger, 1988, widely spread in Southern and Central America, included 12 species [Gielis, 2003, 2011; Kovtunovich et al., 2016]. On the materials of Pterophoridae from Colombia and Ecuador, collected by V.Sinyaev and O.Romanov, we describe two more species new to science. As a result, the genus *Singularia* currently includes 14 species. The holotypes and paratype of the new species are deposited in the collection of the Zoological Institute St. Petersburg, Russia (ZISP).

Singularia zolotuhini Kovtunovich et Ustjuzhanin, sp.n.
Figs 1–3.

TYPE MATERIAL: Holotype ♂, (ZISP, gen.pr. Nr. 1960), COLOMBIA: Quindío Valle del Cocora E of Salento, 2360 m 4°38'41"N / 75°29'15"W, 14.iii.2017, V. Sinyaev leg. Paratype: 1

female (ZISP, gen.pr. Nr.1961) COLOMBIA: Antioquia SW of Dabeiba, 780 m 6°59'27"N / 76°16'28"W, 17–18.iii.2017, V. Sinyaev leg.

DESCRIPTION. External characters. Length of fore wings 19–20 mm (holotype — 19 mm). Head and thorax covered with dark-grey hairs. Labial palpi straight, twice longer than longitudinal eye diameter. Wings dark-grey. First lobe of fore wing distally brightly white, second lobe less bright, with portion of dark fringe apically. Hind wings and fringe unicolorous ash-grey. Legs light-brown with bright white spurs.

Male genitalia. Uncus wide, beak-like sharpened, with clearly expressed narrow dorsal process. Valves asymmetric. Left valve wide, oval, apically narrowing. Right valve narrow, distally bent at a right angle, noticeably narrowing. Anellus arms asymmetric, right arm very wide, left arm narrow, thin. Saccus wide, arched. Aedeagus thin, S-shaped.

Female genitalia. Papillae anales oval, wide. Posterior apophyses long, straight, apices slightly acute. Ductus long, wavy. Bursa copulatrix with longitudinal ribbon-like signum, passing almost through all length of bursa.

DIAGNOSIS. In the male genitalia, in the expressed dorsal process on the uncus, the new species is similar only to *Singularia leptochorda* (Meyrick, 1913), but in the new species the process is narrow, while in *S. leptochorda* it is wide. Additionally, the wide left valve and the S-shaped aedeagus differentiate the new species. In the female genitalia, in the ribbon-like longitudinal signum, the species is also similar to *S. leptochorda*, but differs in the long wavy ductus.

FLIGHT PERIOD. March.

DISTRIBUTION. Colombia.

ETYMOLOGY. The species is named in memory of the Russian entomologist, specialist in Macrolepidoptera, Vadim Viktorovich Zolotuhin (1967–2021), who suddenly passed away 03.06.2021.

Singularia kofani Kovtunovich et Ustjuzhanin, sp.n.
Figs 4–6.

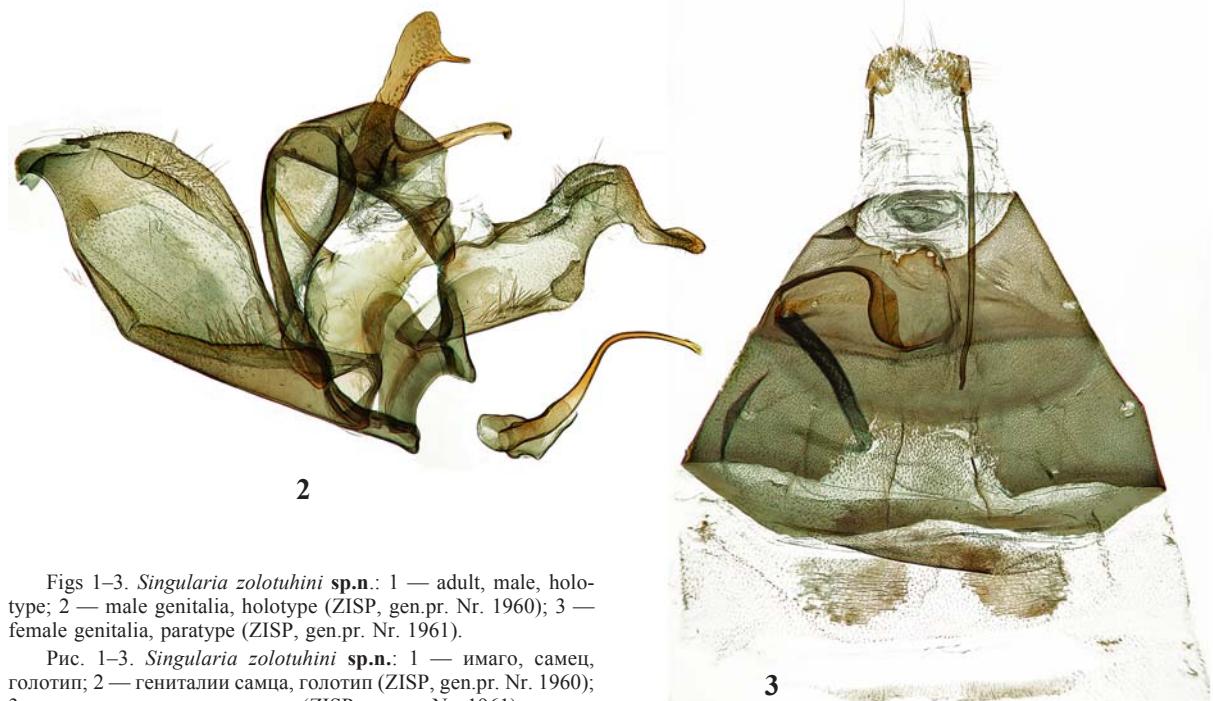
TYPE MATERIAL: Holotype female, (ZISP, gen.pr. Nr. 1962) ECUADOR: Pichincha, Camping Tambo Tanda, 1969 m, 0°01'22"S, 78°38'48"W, 25.x.2011, leg. Sinyaev & Romanov.

DESCRIPTION. External characters. Length of fore wings 18 mm. Head, thorax and tegulae covered with dark-grey hairs. Labial palpi short, straight, twice shorter than longitudinal eye diameter. Wings dark-grey. Wide oblique transverse white band on fore wing medially. Fringe inside cleft grey, basally noticeably lighter. Hind wings and fringe unicolorous dark-grey. Legs light-grey with white spurs.

Female genitalia. Papillae anales oval, elongated. Posterior apophyses long, straight. Lamina postvaginalis robust, sclerotized, wide, rounded, with two narrow elongated rib-



1



2

3

Figs 1–3. *Singularia zolotuhini* sp.n.: 1 — adult, male, holotype; 2 — male genitalia, holotype (ZISP, gen.pr. Nr. 1960); 3 — female genitalia, paratype (ZISP, gen.pr. Nr. 1961).

Рис. 1–3. *Singularia zolotuhini* sp.n.: 1 — имаго, самец, голотип; 2 — genitalии самца, голотип (ZISP, gen.pr. Nr. 1960); 3 — genitalии самки, пататип (ZISP, gen.pr. Nr. 1961).

bon-like folds. Antrum narrow, tabulate, sclerotized, ostium extended, ductus of the same width as antrum but membranous.

DIAGNOSIS. In the wings color, the species is similar to *Singularia brechlini* Kovtunovich et Ustjuzhanin, 2016, but differs in the oblique white band on the fore wing medially. In the female genitalia, in the shape of the lamina postvaginalis and antrum, the new species has no similarity to the other known species.

FLIGHT PERIOD. February.

DISTRIBUTION. Ecuador.

ETYMOLOGY. The species is named after Indian people Kofan, living in Ecuador and Colombia.

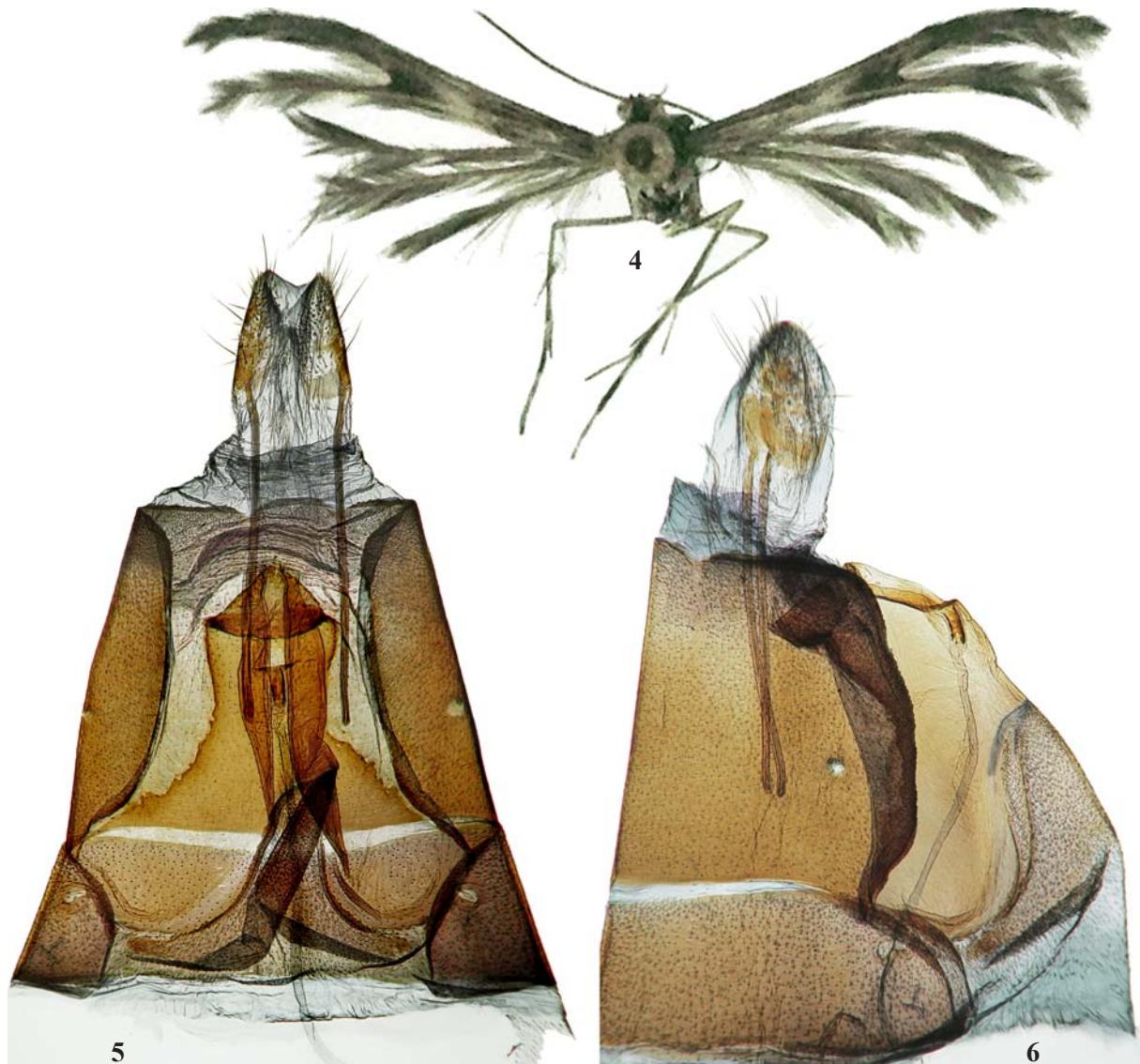
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Figs 4–6. *Singularia kofani*, sp.n.: 4 — adult, female, holotype; 5 — female genitalia, holotype (ZISP, gen.pr. Nr. 1962); 6 — female genitalia, side view.

Рис. 4–6. *Singularia kofani*, sp.n.: 4 — имаго, самка, голотип; 5 — гениталии самки, вид сверху, голотип (ZISP, gen.pr. Nr. 1962); 6 — гениталии самки, вид сбоку.